

**ADDENDUM TO THE FACT SHEET
FOR NATIONAL POLLUTANT DISCHARGE
ELIMINATION SYSTEM (NPDES)
PERMIT NO. WA-005127-6**

I. GENERAL INFORMATION

Facility: City of Entiat
Publicly-Owned Treatment Works (POTW)
1947 Lakeshore Drive
Entiat, WA 98822

II. APPLICATION REVIEW

An application for permit reissuance was received by the Department of Ecology (Department) on March 7, 2005, and accepted by the Department on March 30, 2005. The scope and manner of any review of an application for reissuance of a permit by the Department shall be sufficiently detailed as to insure the following:

- That the permittee is in substantial compliance with all of the terms, conditions, requirements and schedules of compliance of the expired permit;
- That the Department has up-to date information on the permittee's production levels; permittee's waste treatment practices; nature, content, and frequencies of permittee's discharge; either pursuant to the submission of new forms and applications or pursuant to monitoring records and reports resubmitted to the Department by the permittee; and
- That the discharge is consistent with applicable effluent standards and limitations, water quality standards, and other legally applicable requirements listed in WAC 173-220-130.

The application was reviewed and indicated that, with one exception, no significant changes in the treatment process, characteristics of the effluent, or volume of wastewater has occurred. The exception is that in July 2003 the City replaced its DRAIMAD solids handling system (fact sheet page 9) with a belt filter press.

III. PERMIT REAUTHORIZATION

General

A system of ranking the relative significance of the environmental benefit to be gained by renewing a permit, rather than reauthorizing a permit, is followed during the Department's annual permit planning process. Each permit that is due for reissuance is assessed and compared with other permits that are also due for reissuance. The public is notified and input is sought after the initial draft ranking has tentatively established which permits are likely to be completely renewed and which are likely to be reauthorized. All relevant comments and suggestions are considered before a final decision is made regarding the type of reissuance for each permit. The permit reauthorization process, in concert with the routine renewal of high priority permits, allows the Department to reissue permits in a timely manner and minimize the number of active permits that have passed expiration dates.

The Department has determined reauthorization, rather than a complete renewal, is appropriate for this permit.

This fact sheet addendum accompanies the draft permit, which is to be reauthorized to the City of Entiat for the discharge of treated wastewater to the Columbia River. The previous fact sheet is also part of this administrative record and explains the basis for the discharge limitations and conditions of the reauthorized permit.

The existing permit requirements, including discharge limitations and monitoring, do not need to be changed to protect the receiving water quality. The previous fact sheet addressed conditions and issues at the facility at the time when the previous permit was issued. Since the issuance of the current permit, the Department has not received any information which indicates that environmental impacts from the discharge that were not evaluated at the time of the last permit issuance is persuasive enough to undertake a complete renewal of the permit. The reauthorized permit is substantially identical to the previous permit issued on February 5, 2001, except for the modifications discussed later in this addendum.

2000 and 2004 Effluent Data Comparison

An important criterion for considering a permit for reauthorization, rather than renewal, is that the effluent profile has remained relatively consistent and within the permitted effluent limitations. The following table contains a comparison of effluent characteristics from the previous and existing permit cycles. Data from the previous permit cycle, calendar year 2000, are taken from the 2001 fact sheet. Data from the existing permit cycle are taken from discharge monitoring reports (DMRs) submitted to the Department during 2004 and the permit application. Data are presented in the context of their effluent

limits, e. g., monthly values for 5-day Biochemical Oxygen Demand (BOD₅) and Total Suspended Solids (TSS) and daily values for Ammonia, Total Residual Chlorine (TRC) and metals. Annual average values are provided for context. The established effluent limits may be found in the permit document associated with this addendum.

Comparison of Effluent Characteristics During the Previous and Existing Permit Cycles

Parameter	2000 Characterization			2004 Characterization		
	Annual Average	Highest Monthly Average	Highest Single Value	Annual Average	Highest Monthly Average	Highest Single Value
BOD ₅ , in mg/L	2.75	6	--	3.25	6	--
TSS, in mg/L	0.75	3	--	1.25	3.5	--
Fecal Coliform Bacteria, # colonies/100 mL	6	13	--	20	46	--
TRC, in mg/L	0.47	0.36	0.7	0.33	0.48	0.8
Ammonia, in mg/L	a	a	a	0.19	--	0.86
Copper, in mg/L	--	--	0.011	--	--	0.0039
Zinc, in mg/L	--	--	0.08	--	--	0.048
pH	Min = 6.38 Max = 7.22			Min = 6.89 Max = 7.73		

a-The previous permit did not require the City to monitor effluent ammonia. Monitoring for ammonia began in 2001.

As can be seen in the table, the effluent characteristics of the City's 2004 discharge have remained relatively consistent with the 2000 effluent profile. All conventional pollutants are well below the permitted limits. The only parameter the City has exceeded in recent years is the stringent chlorine limit. Chlorine concentrations in the discharge reached 0.8 mg/L, the daily maximum limit, several times during 2004. During other years (2003 and 2005), concentrations have reached 1.0 mg/L, but the City is always in compliance with the monthly average limit. These exceedances are due to the very stringent technology-based limits that must be met at end-of-pipe. Water quality-based chlorine limits, which would incorporate generous dilution factors, would be far less stringent. The City's treatment plant staff has done a commendable job complying with the existing limits. Ammonia concentrations in the discharge are generally at the detection level of 0.07 mg/L, which is typical for a well-run oxidation ditch treatment process. Copper and zinc concentrations in the discharge are typical of municipal treatment plants and likely are due to sloughing of metals from plumbing.

The spreadsheets used to develop the water quality criteria applicable to the discharge and the determination of reasonable potential for the discharge to exceed the water quality standards were not included in Appendix C of the fact sheet associated with the existing permit. These spreadsheets have been updated for this reauthorization incorporating current effluent data and have been appended to this reauthorization

document. The reasonable potential analysis indicated no likelihood for the discharge to exceed the water quality standards, as was true for the last analysis performed in 2001.

The discharge limits and conditions in effect at the time of expiration of the previous permit are carried over unchanged to this reauthorized permit. Assessment of compliance and inspections of the facility during the previous permit term indicate that the facility should not be placed on a high priority for permit renewal.

Modifications to the Permit

The only changes to the previous permit are the submittal date requirements and modifications to the whole effluent toxicity (WET) testing requirements. Submittal requirements from the previous permit that were completed and submitted, and do not require additional or continued assessment were removed from the permit. Permit requirements that have been fulfilled are the outfall evaluation (Special Condition S8) and the updated sewer use ordinance (S11).

The submittal dates for the other standard compliance and submittal requirements that have been carried over from the past permit into this reauthorized permit have been adjusted to the proposed permit schedule. The Department considered these submittals necessary in the previous permit and no information has come forward to cause a reconsideration of the submittal requirement. Submittals in this category are generally routine permit requirements for municipal dischargers and include infiltration and inflow evaluations (S4.D) and wasteload assessments (S4.E). In addition, submittal of discharge monitoring reports (DMRs) are required.

The WET Testing requirements in the existing permit have been modified and streamlined in the proposed permit. The existing permit required the City to characterize its discharge for toxicity. Effluent characterization is the initial stage of quantifying toxicity and is, by design, an intensive and comprehensive process. A review of the results indicated no toxicity in the discharge and no need for toxicity effluent limits. Consequently, S8 (Acute Toxicity) and S9 (Chronic Toxicity) have been considerably streamlined from the existing permit. The proposed permit requires the City to test its effluent for acute and chronic toxicity in the spring and autumn of 2008. The data generated by these tests will determine the necessity for toxicity limits at the next permit renewal.

WAC 173-205-030(4) allows the Department the discretion to delay WET Testing in the event of a treatment plant upgrade. At this time (August 2005) the City intends to implement a major upgrade to the POTW, although the schedule has not yet been determined. S2.E contains a provision allowing the City to request a delay of the 2008 WET Testing program until after the upgrade is completed, if certain conditions are met. The conditions are: (1) approval of the Facility Plan by the Department, (2) securing of funding, and, (3) that construction is scheduled to commence by spring of 2008. The

letter requesting the delay must address these conditions. In the event these three conditions are not fulfilled, the City is required to conduct the WET Testing as specified in the permit. At this time the Department is reviewing the second draft of the Facility Plan and funding sources have been identified; however, the Facility Plan must be approved before funding can be awarded and construction commences.

Issuance Process

Public notice of the availability of the draft reauthorized permit is required at least 30 days before the permit is issued [Washington Administrative Code (WAC) 173-220-050]. The fact sheet and draft permit are available for review (see Appendix A—Public Involvement for more detail on the Public Notice procedures).

After the public comment period has closed, the Department will summarize the substantive comments and the response to each comment. The summary and response to comments will become part of the file for the permit and parties submitting comments will receive a copy of the Department's response. Comments and the resultant changes to the permit will be summarized in the fact sheet addendum, Appendix D—Response to Comments.

IV. RECOMMENDATION FOR PERMIT ISSUANCE

The Department proposes that this permit be issued for 5 years.

APPENDIX A – PUBLIC INVOLVEMENT INFORMATION

The Department has determined to reauthorize a discharge permit to the applicant listed on page 1 of this fact sheet addendum. The permit contains conditions and effluent limitations that are described in the fact sheet.

The Department published a Public Notice of Application and Draft (PNOA/D) on October 3, 2005 in the Wenatchee World to inform the public that an application, draft permit and fact sheet were available for review. Interested persons are invited to submit written comments regarding the draft permit. The draft permit, fact sheet, and related documents are available for inspection and copying between the hours of 8:00 a.m. and 5:00 p.m. weekdays, by appointment, at the regional office listed below. Written comments should be mailed to:

Water Quality Permit Coordinator
Department of Ecology
Central Regional Office
15 W. Yakima Avenue, Suite 200
Yakima, WA 98902

Any interested party may comment on the draft permit or request a public hearing on this draft permit within the 30-day comment period to the address above. The request for a hearing shall indicate the interest of the party and the reasons why the hearing is warranted. The Department will hold a hearing if it determines there is a significant public interest in the draft permit (WAC 173-220-090). Public notice regarding any hearing will be circulated at least 30 days in advance of the hearing. People expressing an interest in this permit will be mailed an individual notice of hearing (WAC 173-220-100).

Comments should reference specific test followed by proposed modification or concern when possible. Comments may address technical issues, accuracy and completeness of information, the scope of the facility's proposed coverage, adequacy of environmental protection, permit conditions, or any other concern that would result from reauthorization of this permit.

The Department will consider all comments received within 30 days from the date of the PNOD indicated above, in formulating a final determination to issue, revise, or deny the permit. The Department's response to all significant comments is available upon request and will be mailed directly to people expressing an interest in this permit.

Further information may be obtained from the Department by telephone at (509) 457-7105, or by writing to the address listed above.

This fact sheet addendum and the proposed permit were written by Jim LaSpina.

APPENDIX B - RESPONSE TO COMMENTS

During the public review period the City of Entiat submitted the only comments received concerning this permit.

The City requested a number of changes to the Fact Sheet. Unfortunately those changes cannot be made as the Fact Sheet accompanies the expiring permit and was not rewritten for this reauthorization. However, this response addresses the changes.

1. Page 5- Change Address to 1947 Lakeshore Drive.
 - a. *The Department acknowledges that the address has changed since the last permit was written. The new permit carries the correct address.*
2. Page 6- Under Treatment Plant: Drying Beds are used for emergencies only; a Monobelt filter press for sludge dewatering was installed in July of 2003.
 - a. *The Department acknowledges these changes in plant operation.*
3. Page 7- The communitor was never installed. Except in emergency, sludge is removed from the system via the belt filter press. Sludge is removed by pumping from the oxidation ditch directly to the press. Filtrate is returned to the oxidation ditch.
 - a. *The Department acknowledges this mode of sludge removal at the plant.*
4. Page 9- Residual solids management. Second sentence- The city currently utilizes a belt filter press to dewater sludge. The system injects polymer into the sludge stream, which is then mechanically conveyed by an auger system to a concrete pad. Sludge is then moved and stockpiled before being transported to the county landfill on an annual basis.
 - a. *The Department acknowledges the city's current mode of sludge management.*
5. Page 18- Planning and grant-seeking process has begun.
 - a. *The Department appreciates that the city has begun seeking grants/loans for facility improvements.*
6. Page 19- Sediment quality- Riverbed in the outfall area has been inspected. This inspection took place 12-20-01. A copy of that inspection accompanies this letter.
 - a. *The Department acknowledges completion of the outfall inspection and receipt of the inspection report.*

The City also requested the following changes to the proposed permit.

1. Page 1- Plant address. Change address to 1947 Lakeshore Drive
 - a. *The change has been made.*
2. Page 18- S6- Change Town to City
 - a. *The change has been made.*

No other comments were received.